Forest Health Protection
Pacific Southwest Region

Date: September 22, 2010
File Code: 3420

To: Patricia Grantham, Forest Supervisor, Klamath National Forest

Subject: Biological Evaluation of Vista Thin – Scott River Ranger District (FHP Report No. N10-07)

On June 1 – 4, 2010, Cynthia Snyder (Entomologist) and Pete Angwin (Plant Pathologist) from Forest Health Protection visited the Klamath National Forest to review past, current and future thinning projects requesting FHP funding with Roger Siemers (Klamath National Forest SO).

On June 3, Cynthia, Pete and Roger were joined by Dave Burgess and Jessica Larson (Scott River Ranger District) to look at the Vista Thin area and revisit the Tompkins Thin, stand 531-2, which was 172 acres hand thinned and piled in FY09 funded by FHP ($102,000) and NFVW ($35,760) and funded through FHP carryover for 85 acres ($68,000) in FY2010.

Observations and recommendations for the planned projects areas are as follows:

Vista Thin
The Klamath NF wants to conduct thinning, piling and burning in ponderosa pine plantations in the Vista Thin area. All stands are to be hand thinned to a 20 foot spacing, piled and burned. We visited plantation units 505-57 (N41º19.857', W122º40.918'), 505-54 (N41º19.577', W122º40.799') and 505-51 (N41º18.811', W122º40.063'). Plantations were planted in the 1980s primarily with Jeffery pine and ponderosa pine. Current stand density is approximately 250-400 TPA, reaching capacity with canopies interlocking and self-pruning starting to occur. Current average overstory diameter is 8 inches DBH.

Stand 505-57 is 18 acres planted with Jeffery pine and ponderosa pine in 1988 and has white fir and incense cedar seeded into the understory. The pines are on average 7 inches DBH with uneven spacing (2-30 feet). The site is very poor and rocky. The proposed thinning to a 20 foot spacing favoring incense cedar above pines would be done by hand cut and pile.

NORTHERN CALIFORNIA SHARED SERVICE AREA
3644 AVTECH PARKWAY, REDDING, CA 96002
530-262-2437

Cynthia Snyder, *Entomologist*
clsnyder@fs.fed.us

Pete Angwin, *Plant Pathologist*
pangwin@fs.fed.us

Stand 505-54 is 67 acres that had been harvested in 1986 and the openings planted with ponderosa pine, Jeffery pine and incense cedar in 1988 and 1989. Douglas-fir has since seeded into the understory. The current density is 250-400 TPA with thickets of 300-600 TPA. The average diameter outside of the thickets is 10-14 inches DBH and within the tickets only 6-10 inches (Figure 1). There is some dwarf mistletoe in the Dougals-fir and some sugar pine mortality was seen on the edge of the stand most likely caused by white pine blister rust. The proposed treatment should remove trees up to 12 inches DBH leaving a 20 foot spacing.

Stand 505-51 is 8 acres planted with ponderosa pine, Jeffery pine and Douglas-fir in 1989. Seeding in of Douglas-fir and incense cedar has occurred. Current density is about 400 TPA with average overstory diameter about 5 inches DBH (Figure 2). Douglas-fir and western pine dwarf mistletoe are present throughout the stand as well as broom rust in the incense cedar.

Figure 1. Stand 505-54 is dense, small diameter ponderosa pine and Douglas-fir with very dense thickets.

Figure 2. Stand 505-51 is dense, small diameter mixed conifer.

Tompkins Thin

We looked at stand 531-2 which was 172 acres hand thinned and piled in FY09 funded by $102,000 by FHP and $35,760 by NFVW. The overall stand was thinned to a 10 inch DBH leaving a residual of 74 conifers and 12 hardwoods per acre with 15% thinned to 170 TPA (16 foot spacing), 15% thinned to 48 TPA (30 foot spacing with gaps around sugar pine and oak) and 70% thinned to 90 TPA (22 foot spacing). The District favored Douglas-fir and incense cedar then ponderosa and Jeffrey pines. Dwarf mistletoe was still present in the Douglas-fir and sugar pine (Figure 3).

The Klamath NF awarded Greyback Forestry Inc. the contract to thin 85 acres in the Tompkins Thin in FY2010. Stand 505-57 is 18 acres planted with Jeffery pine and ponderosa pine in 1988 and has white fir and incense cedar seeded into the understory. The pines are on average 7 inches DBH with uneven spacing (2-30 feet). The site is very poor and rocky. The proposed thinning to a 20 foot spacing favoring incense cedar above pines would be done by hand cut and pile (Figure 4).

Figure 3. Stand 531-2, thinned in FY09.

Figure 4. Stand 505-57, scheduled for thinning in FY10.

Summary

The proposed treatments at Vista Thin, if fully implemented, will be effective in addressing concerns regarding bark beetles, fire and drought, and will meet the Regional Forester's density management policy that high risk density levels will not be reached again for at least 20 years. I fully support the treatments as described.

If you have any questions regarding this report and/or need additional information please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

Cynthia Snyder
Entomologist
Northern CA Shared Service Area

CC: Roger Siemers, Dan Blessing, Dave Burgess, Carl Varak, Jessica Larson, Ray Haupt, John Buehler, Pete Angwin, Sheri Smith, Julie Lydick and Phil Cannon